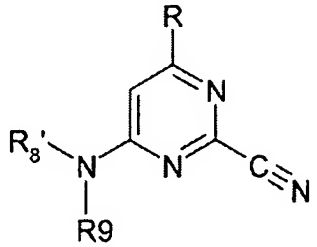
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-10. (Cancelled).

11. (New) A compound of formula IV, or a pharmaceutically acceptable salt thereof



IV

in which

R is H, -R2, -OR2 or NR1R2,

wherein R1 is H, lower alkyl or C_3 to C_{10} cycloalkyl, and

R2 is lower alkyl or C_3 to C_{10} cycloalkyl, and

wherein R1 and R2 are independently, optionally substituted by halo, hydroxy, lower alkoxy, CN, NO_2, or optionally mono- or di-lower alkyl substituted amino;

R8' is optionally substituted aryl–lower alkyl

wherein R8' is optionally substituted by R10 which represents from 1 to 4 substitutents selected from halo, hydroxy, CN, NO_2, -O-C(O)-, optionally substituted (lower-alkyl, C_3-C_{10}cycloalkyl, lower-alkoxy, lower-alkenyl, lower-alkynyl, optionally mono- or di-lower alkyl-substituted amino or N-heterocyclyl), where N-heterocyclyl denotes a saturated, partially unsaturated or aromatic nitrogen containing heterocyclic moiety attached via a nitrogen atom thereof having from 3 to 8 ring atoms optionally containing a further 1, 2 or 3 heteroatoms selected from N, NR6, O, S, S(O) or $S(O)_2$ wherein R6 is H or optionally substituted (lower alkyl, carboxy, formyl, acetyl, propionyl, benzoyl, amido, aryl, S(O) or $S(O)_2$), and wherein the N-heterocyclyl is optionally fused in a bicyclic structure with a benzene or pyridine ring, and wherein the N-heterocyclyl is optionally linked in a spiro structure with a 3 to 8 membered cycloalkyl or heterocyclic ring wherein the heterocyclic ring has from 3 to 10 ring members and contains from 1 to 3 heteroatoms selected from N, NR6, O, S, S(O) or $S(O)_2$ wherein R6 is as defined above;

wherein R10 is optionally substituted by R11 which represents from 1 to 4 substituents selected from halo, hydroxy, CN, NO_2, oxo, optionally substituted (optionally mono- or di-lower alkyl-substituted amino, lower alkyl, optionally-lower alkyl substituted COOH, sulphinyl, sulphonyl, or N-heterocyclyl which is as defined above;

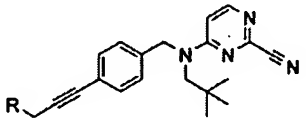
wherein R11 is optionally substituted by R12 which represents from 1 to 4 substituents selected from halo, hydroxy, CN, NO_2, oxo, hydroxy lower alkyl, C_3-C_{10}cycloalkyl, optionally lower alkyl-substituted carboxy, hydroximine, or N-heterocyclyl as defined above,

and wherein

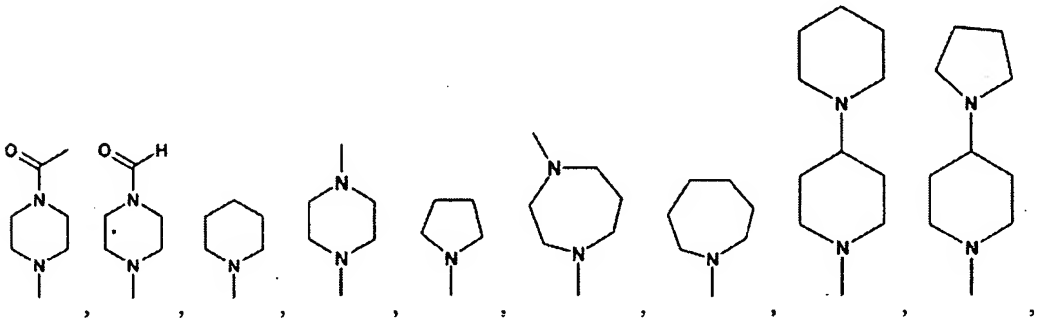
R9 is H or optionally substituted lower alkyl, and

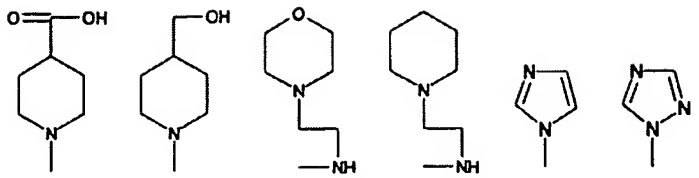
wherein R9 is optionally substituted by halo, hydroxy, oxo, lower alkoxy, CN, NO_2, or optionally mono- or di-lower alkyl substituted amino;

12. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:

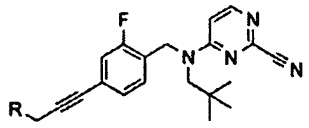


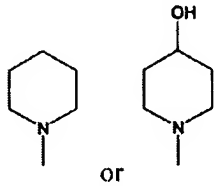
wherein R is selected from the group consisting of:



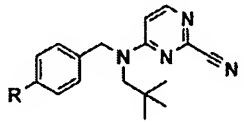

, , , , , , and -NH_2.

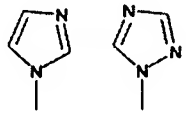
13. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



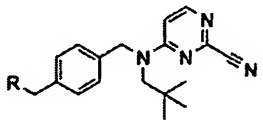

wherein R is or .

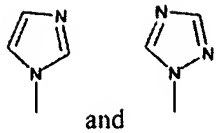
14. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



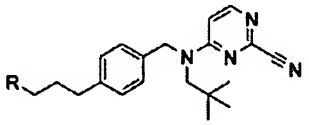

wherein R is selected from the group consisting of: , , and -CH=CH_2.

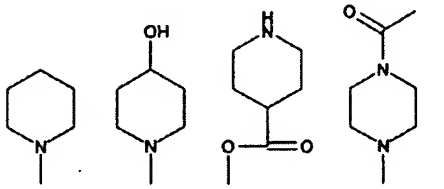
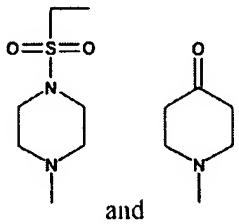
15. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



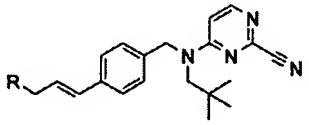
wherein R is selected from the group consisting of:  and .

16. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:

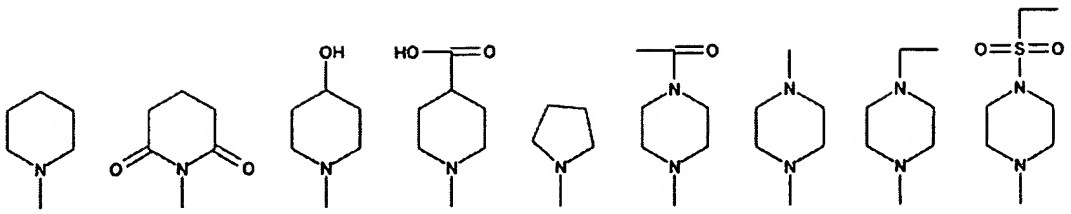


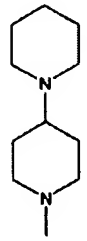
wherein R is selected from the group consisting of:  ,  and .

17. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



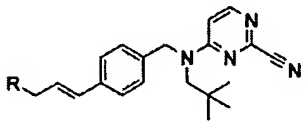
wherein R is selected from the group consisting of:

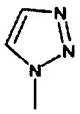




and .

18. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



wherein R is selected from the group consisting of: -CN,  , and  .

19. (New) The compound according to claim 11, which is selected from the group consisting of 4-[(2,2-dimethyl-propyl)-(4-[1,2,4]triazol-1-yl-benzyl)-amino]-pyrimidine-2-carbonitrile,

4-{(2,2-dimethyl-propyl)-[4-(3-methyl-3*H*-imidazol-4-yl)-benzyl]-amino}-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-oxazol-2-yl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-[1,2,4]triazol-1-ylmethyl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-ethyl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-((2,2-dimethyl-propyl)-{4-[3-(4-hydroxyimino-piperidin-1-yl)-prop-1-ynyl]-benzyl}-amino)-pyrimidine-2-carbonitrile, and methanesulfonic acid 2-(4-{[(2-cyano-pyrimidin-4-yl)-(2,2-dimethyl-propyl)-amino]-methyl}-phenyl)-propyl ester.

20. A pharmaceutical composition comprising a compound according to claim 11 as an active ingredient and a pharmaceutically acceptable carrier material.

21. A method of treating a patient suffering from or susceptible to a disease or medical condition in which cathepsin K is implicated selected from the group consisting of osteoarthritis, rheumatoid arthritis and osteoporosis, comprising administering a compound according to claim 1, or a pharmaceutically acceptable salt thereof, to the patient.